

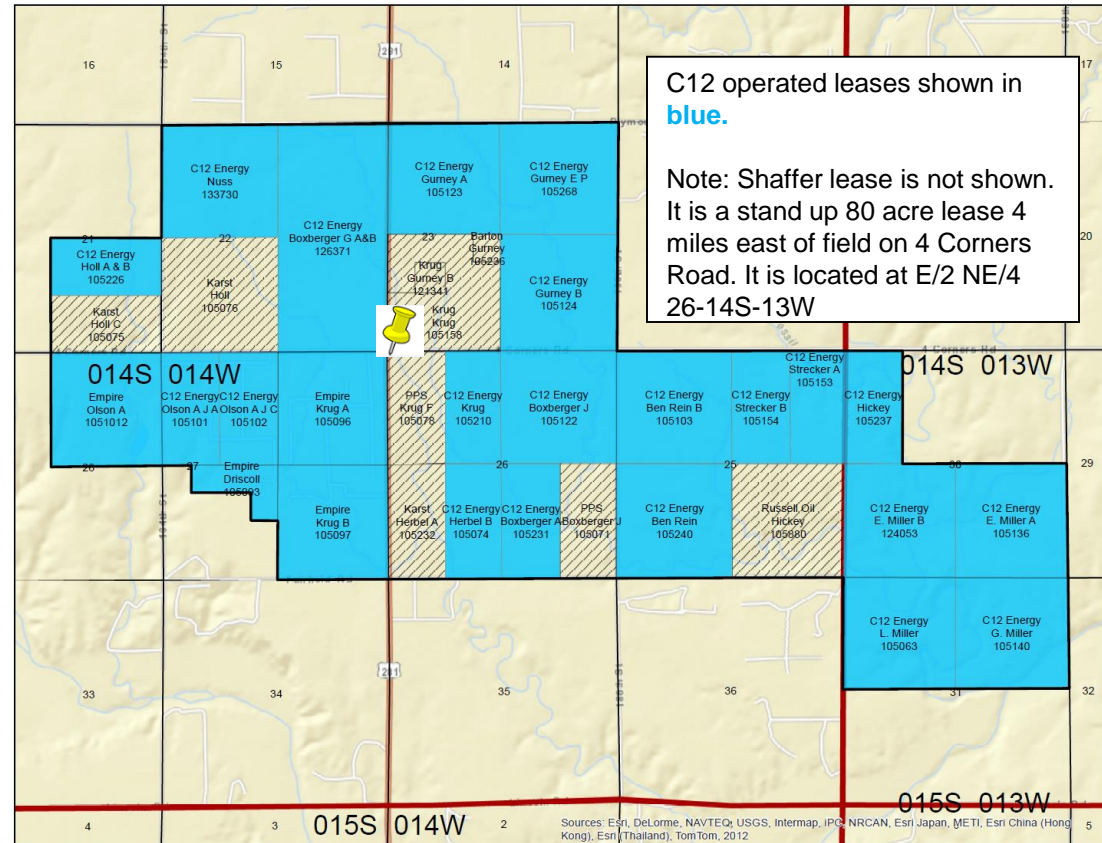
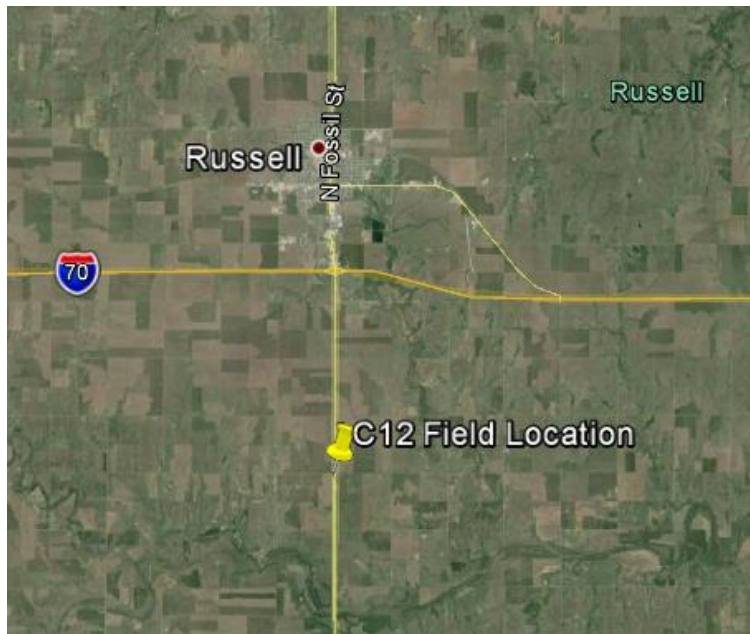
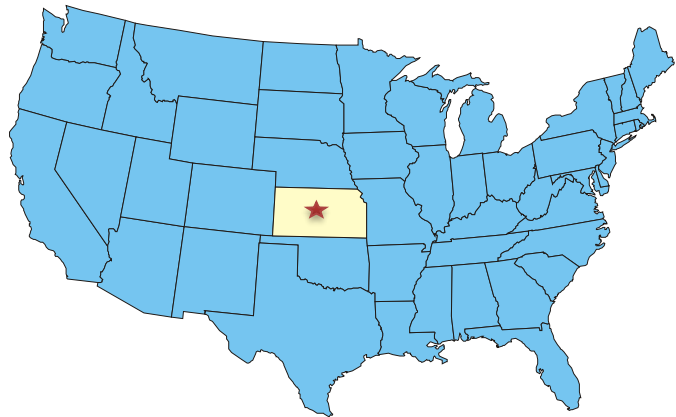


# Overview of C12 Kansas Assets

- 100+ BODP production capability (8/8ths)
- 26 leases in large Hall Gurney Field ; Acreage held by production
- Recovery to date: ~24.5 mmboe; 44% of OOIP
- Stacked Pay
  - Lansing Kansas City, Tarkio, Gorham, Topeka, Toronto
- ~84% NRI and ~100% WI
- 128 wells:
  - 40 Producing
  - 32 Injection
  - 56 Shut-in for low oil prices (100% have been online in past year)
  - 0 Shut-in for mechanical integrity (low P&A liability)
- Identified improvement opportunities
  - Lower lease operating expense
  - Artificial lift optimization
  - Recomplete to horizons that have not been completed
  - Water flood optimization
  - CO2 EOR development



# Field Location

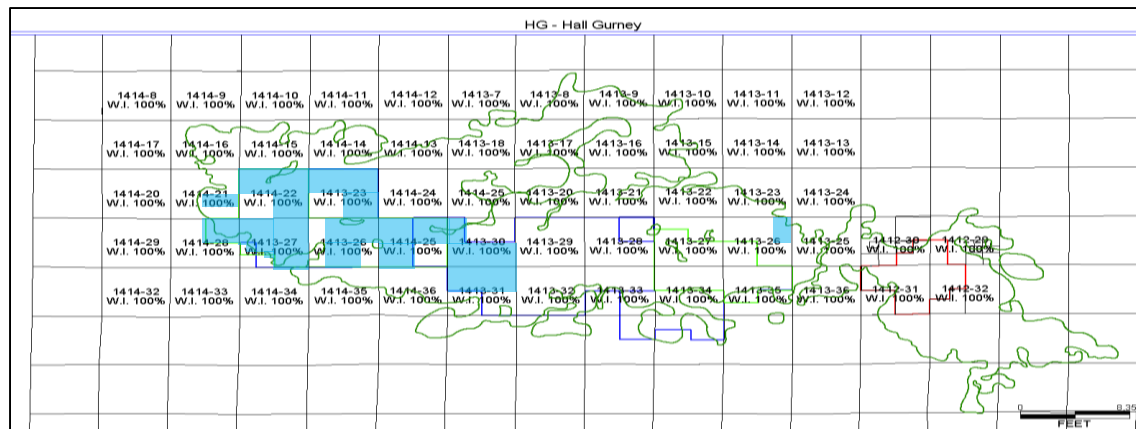




# Hall Gurney Field Overview

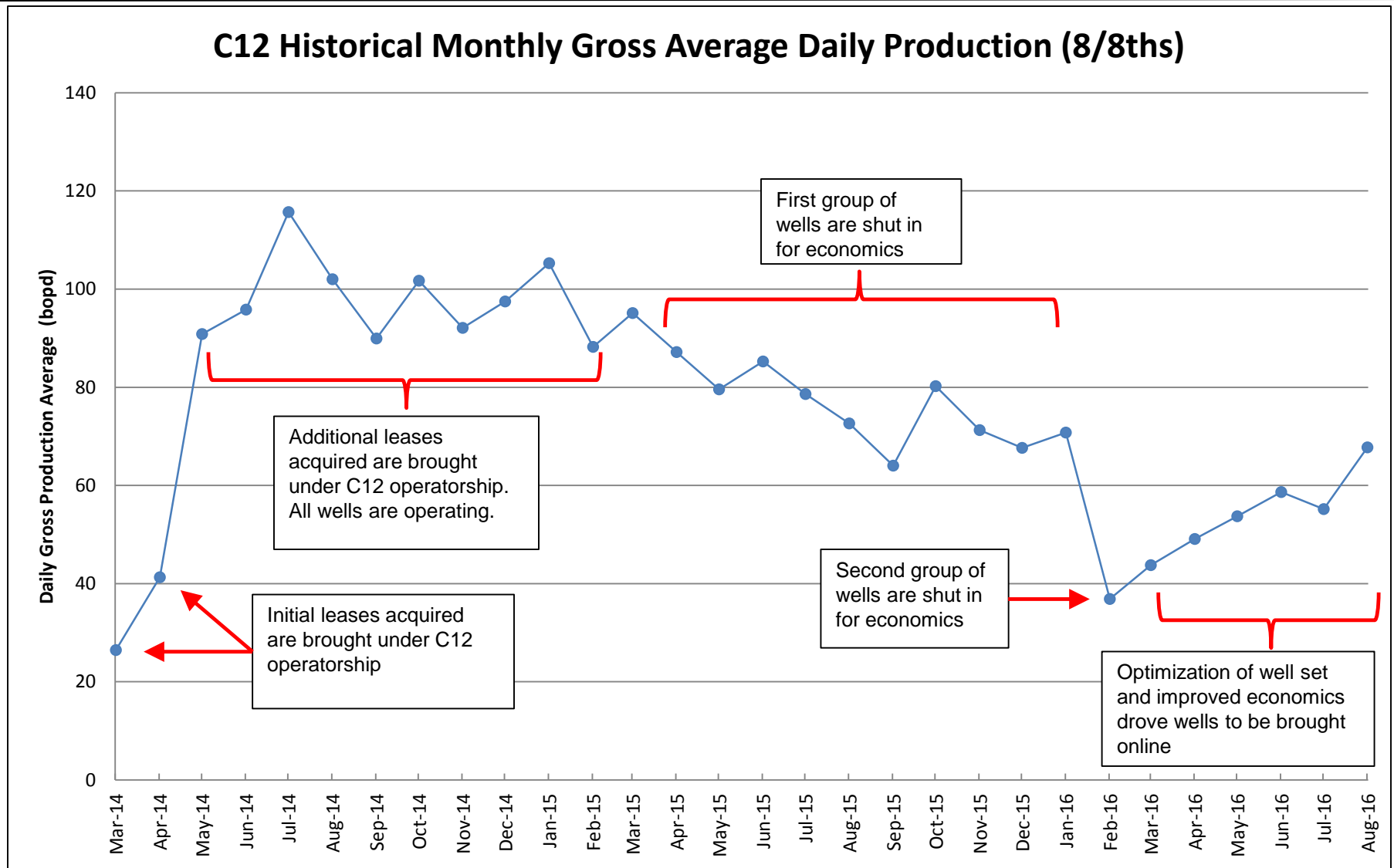
- Discovered 1931
- Initial primary production from solution gas drive
- Waterflood began in 1950's
- 48,880 acres (total field)
- Recovery to date ~ 163 mmboe (49% of OOIP)
- OOIP of 335 million bbls (total field)
- 7000+ wells have been drilled into the Hall Gurney
- Produces principally from Lower Kansas City “C” & “G” Zones
  - Oomoldic limestone at 3,000 ft depth
  - LKC C Zone -  $\sim 10 \pm 5$  ft thick,  $\Phi_{avg} = 10\% \pm 12\%$  range 4%-30%,  $K=0.001-600$  mD,  $Sw_i = 0.11-1$
  - LKC G Zone -  $\sim 25 \pm 10$  ft thick,  $\Phi_{avg} = 12\% \pm 12\%$ ,  $K=0.001-600$  mD,  $Sw_i = 0.11-1$

C12 = C12 operated lease





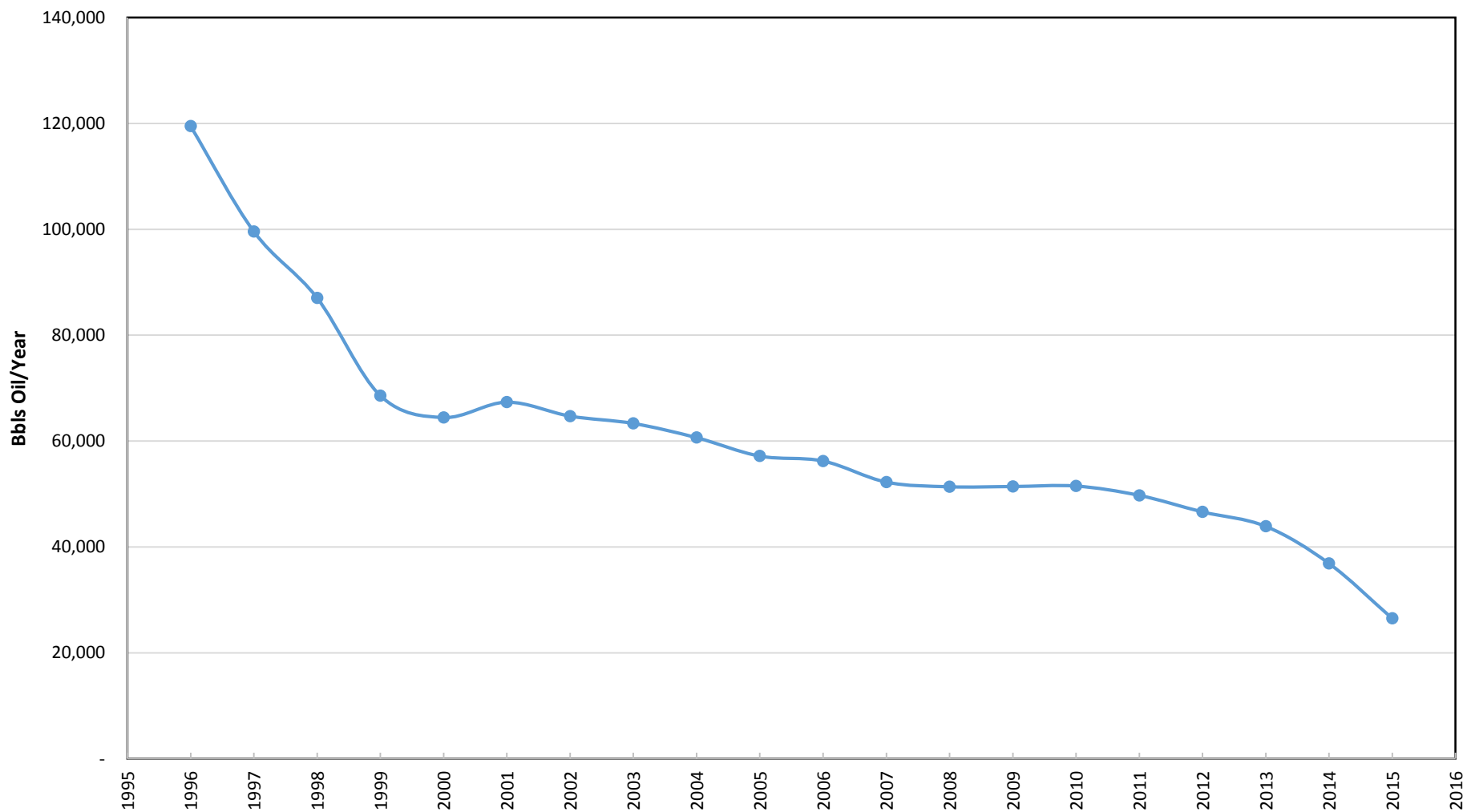
# C12 Historical Monthly Gross Average Daily Production (8/8<sup>ths</sup>)





# C12 Lease Historical Yearly Production

Production For C12 Owned Leases Over Last 20 Years

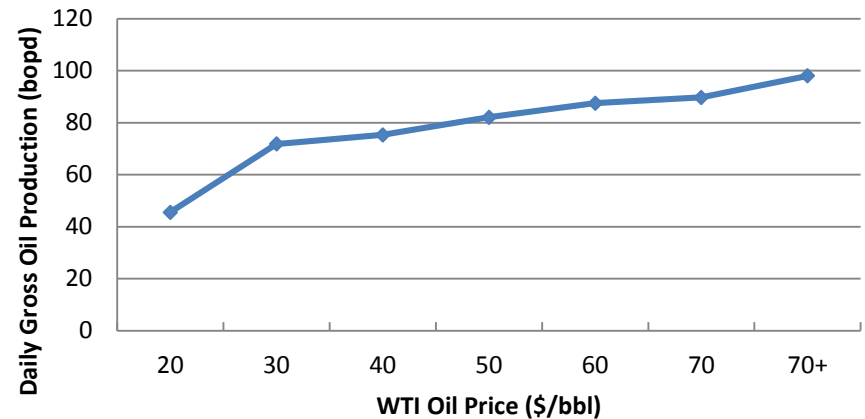




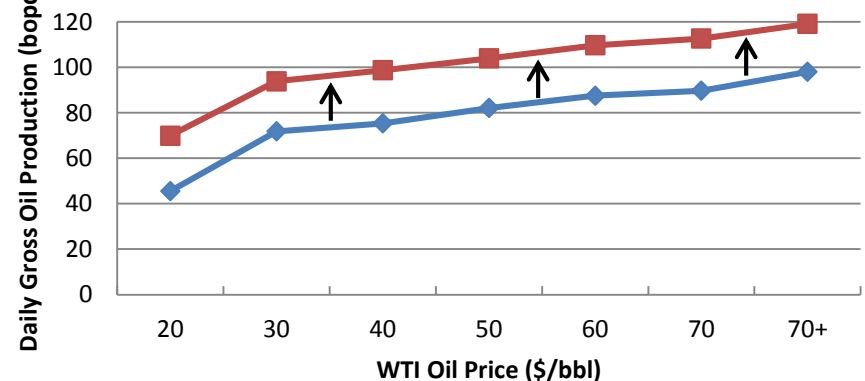
# C12 Oil Production Pro Forma

- C12 Kansas well production is based on LOE and WTI spot price
  - ~48 wells are currently shut-in due to their individual economics at low oil price
  - Improvement in WTI price will allow for more wells to be brought online, increasing production and reducing LOE/bbl costs
- Chart on right shows how production will react to WTI price based on historical C12 LOE
  - Current improvements being made on LOE will shift more production to being economic at lower WTI prices
- Oil is produced to tank batteries on leases and trucked offsite when the tank is full
  - Oil marketer is Coffeyville Resources

**C12 Kansas Potential Production Based on WTI Price**



**C12 Kansas Potential Production, With Improvements Recommended In Slide Deck, Based on WTI Price**

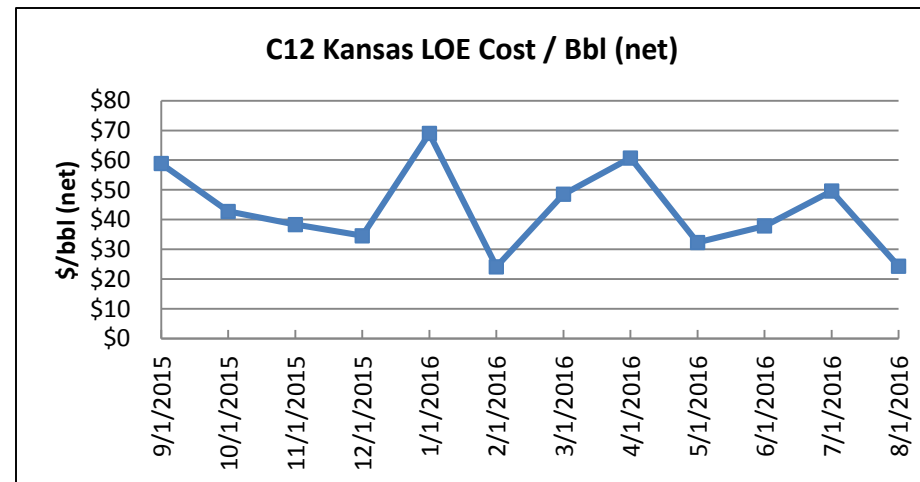
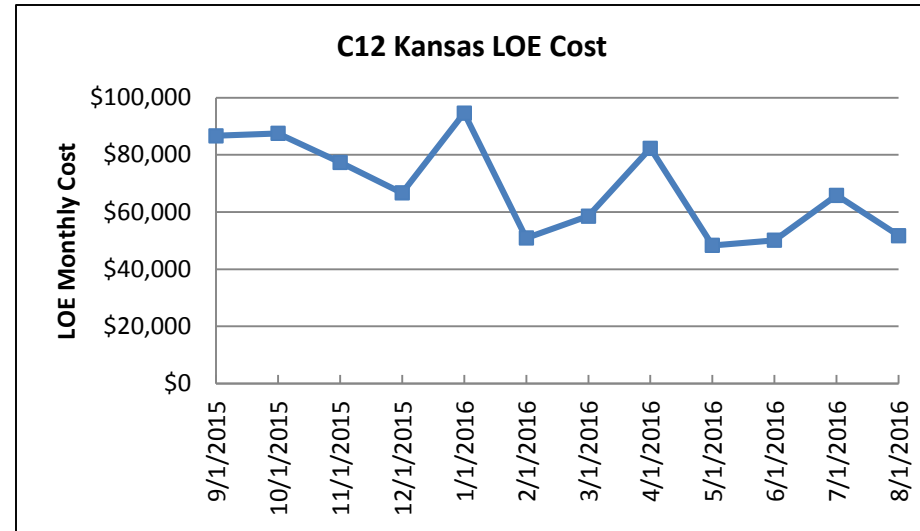




# Lease Operating Expense

In 3Q 2015, C12 reduced LOE by:

- Reduced staff head count
  - Utilize local part-time help and contract pumping when needed
- Renegotiated contracts >\$2000
- Moved to single chemical vendor
- Shut-in uneconomic wells, reducing chemical and utility costs
- Investments
  - Fixing things right the 'first time'; reduce repeat failures
  - ID addl. opportunities to reduce LOE ~ **15%**

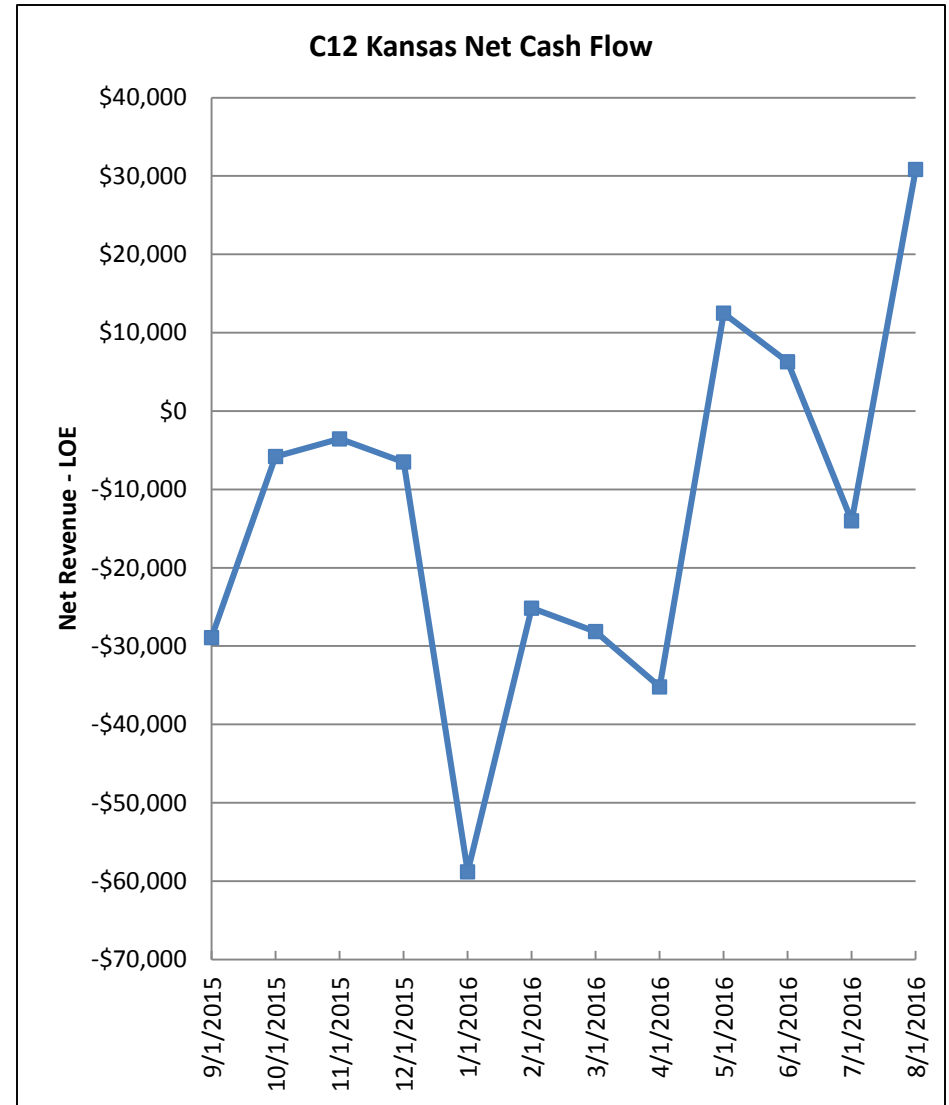






# C12 Kansas Cash Flow

- In 3Q 2015, focus became maximizing cash flow, not total production
- Ensuring the right well set is online based upon individual well economics
  - Utilities and chemical costs have come down drastically while maintaining production
  - Have continued to optimize individual well operating costs
- Focus on optimizing wells over past year
  - Re-sheaving
  - Upsizing/downsizing pumps
  - TA'ing uneconomic wells
  - Optimizing rod designs to lengthen life of well between workovers
- Projected cash flow will increase with continued LOE reduction projects and development







# Cash Flow Improvement Opportunities

- **Convert Gurney A2 to injector (~2 bopd)**
  - Gurney A & EP leases do not have water injection system
  - Water must be hauled for disposal
  - Application for conversion approved Aug '16
  - Expected cost \$15,000
  - Already have pump, pump house, flow lines
  - Expected LOE savings from eliminate water hauling ~ \$2000/month
  - Addl. 2 bopd (addl. \$2000+/month income)
  - Payback in ~**4 months**
- **Re-complete Boxberger A #2 (~4 bopd)**
  - Well is offset (660') from ~14 bopd Boxberger J#1
  - Boxberger J#1 has no decline over last 25 years and produces at~ 14 bopd
  - Expected production post re-completion is 4 bopd
  - Payback in ~ **1 year**
- **Acidize (+6 bopd)**
  - Numerous wells not stimulated in decades
  - A review of wells indicates ~23 wells are acidizing candidates
  - Acid job cost = \$1600/well
  - Expected boost in production = 25%/well or 6 bopd total
  - Payback is ~ **5 months**
- **Open up additional horizons available in current wellbores (+7 bopd)**
  - Many wells have not been completed in all of their available horizons
  - Completing Topeka, Tarkio, and Lower LKC to the Crown Krug #4
    - Estimated benefit of 4.5 bopd and a payback of 5 months
  - Add perfs in the lower LKC in the Empire Krug A #6
    - Estimated benefit of 1.4 bopd and a payback of 1 month
  - Add perfs in upper LKC in the Empire Krug A #8
    - Estimated benefit of 1 bopd and a payback of 1 month



# CO2 EOR Development Potential

## *Hall Gurney Post Rock Unit*

### Development Plan

- Obtain development approval of Hall Gurney Post Rock Unit owners:
  - Total Unit ~4200 acre; C12 acreage ~ 3320 acres
- Re-pressure reservoir to ~1200 psi (miscibility pressure ~ 1150 psi)
- Build 8 mile 4" CO2 pipeline transporting CO2 from Ethanol Plant in Russell, KS
  - CO2 Supply contracted w/ White Energy, 7.5 mmcf/d
  - Build CO2 capture facility at Ethanol Plant
- Build Central Processing Facility for fluid processing & recycle compression
  - FEED studies and some final engineering completed
- Install new field flowlines; workover wells as needed to implement CO2 EOR flood
- Full Field geomodel in Petrel; simulation models built in sectors, history matched.

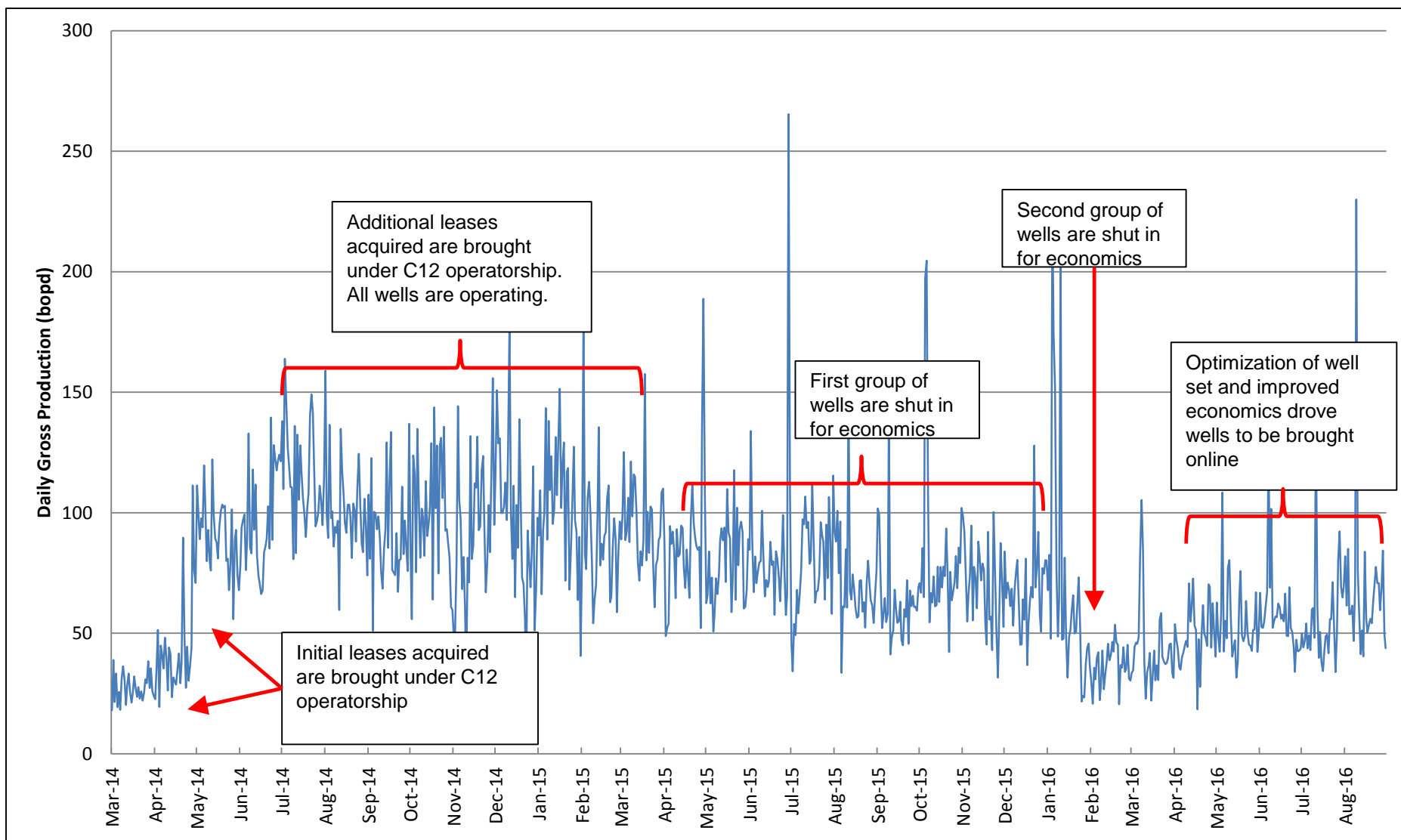
Reserves	11 mmboe (17% RF)
IRR	+30% at \$70/bbl WTI
NPV	\$70 MM at \$70/bbl WTI
Development Cost	84 MM (gross)



# Appendix



# C12 Historical Monthly Gross Production (8/8<sup>ths</sup>)

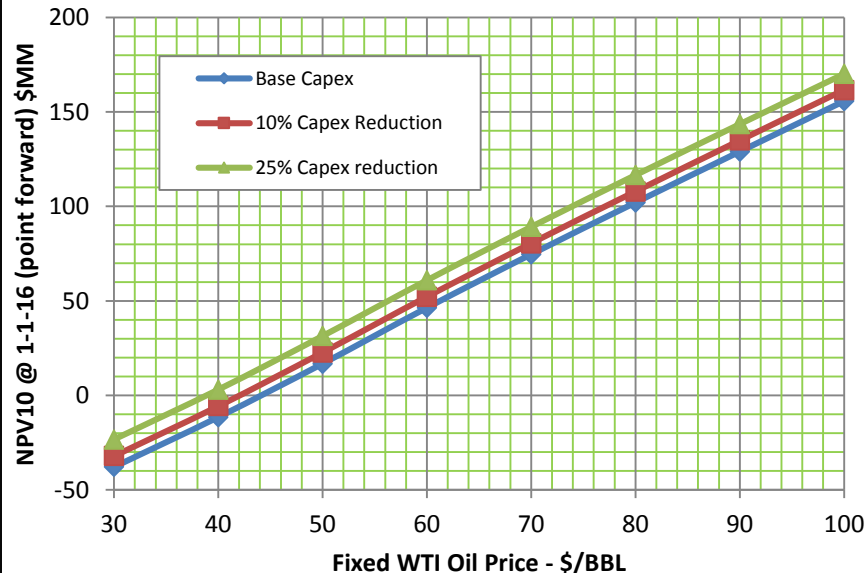




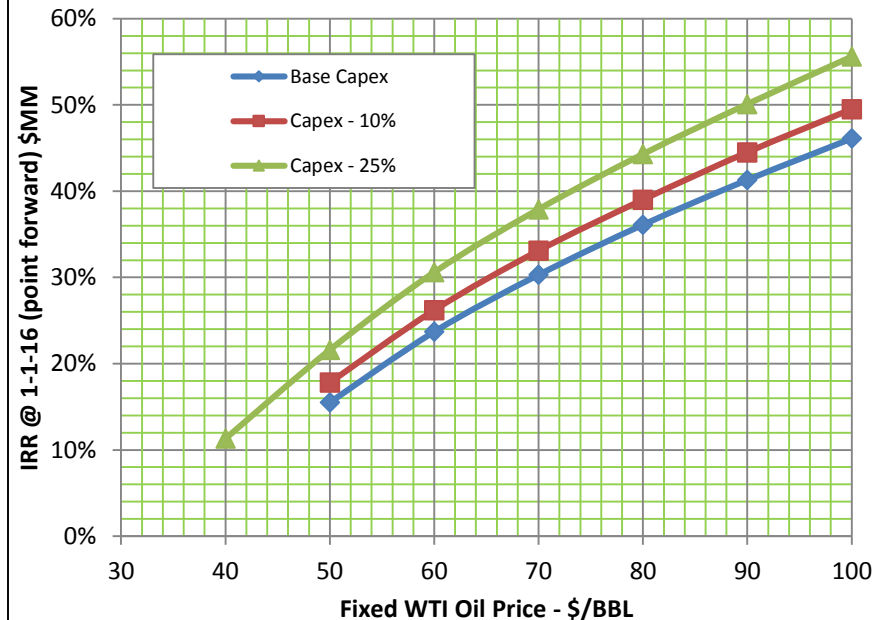
# Proposed C12 Kansas CO<sub>2</sub> Project Economics

- Economics of CO<sub>2</sub> project are very strong at a range of oil prices
- Includes all the of the 'Postrock Unit', not all of which is owned by C12
  - Additional acreage or partnership would yield similar or potentially better economics

**Hall Gurney CO<sub>2</sub> Flood NPV<sub>10</sub>  
(point forward Jan 2016)**



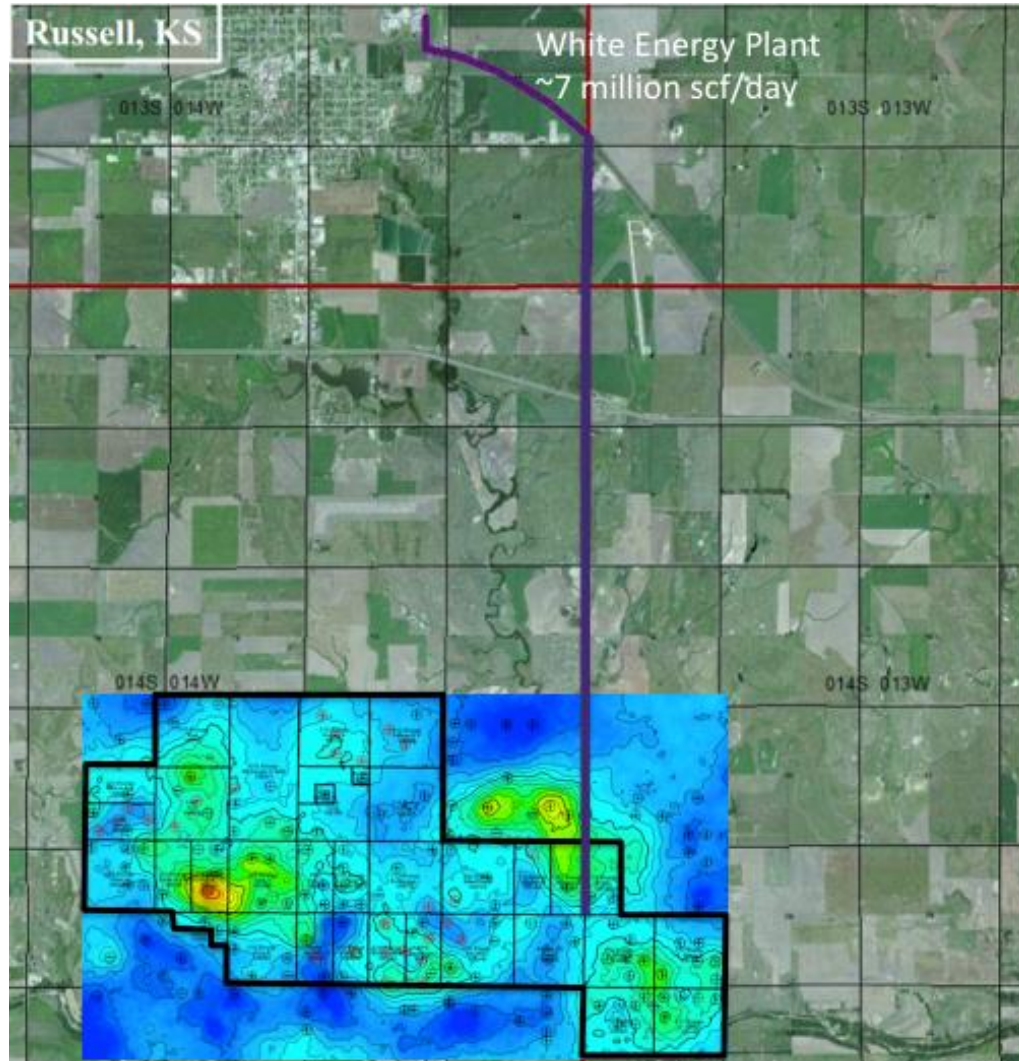
**Hall Gurney CO<sub>2</sub> Flood IRR (Point Forward)**



- Capex values for project were put together in 2015
  - Due to decline in oil prices, services and equipment have become less expensive in 2016
  - Ran additional economics for 10% and 25% savings on estimated capital to see how project returns are improved



# Kansas Project - Hall Gurney Post Rock Unit



- Located south of Russell, KS (Central KS)
- Leases purchased Q4 2013 – Q3 2014
- Unit Area – 4,200 acres
  - Includes leases not owned by C12
    - C12 owns ~3320 acres
- CO<sub>2</sub> Supply
  - White Energy Ethanol Plant
  - ~7 million scf/d
  - Compression on site
  - Pipeline – 7.5 miles

**Recovery  
Method**

**Potential  
Incremental**

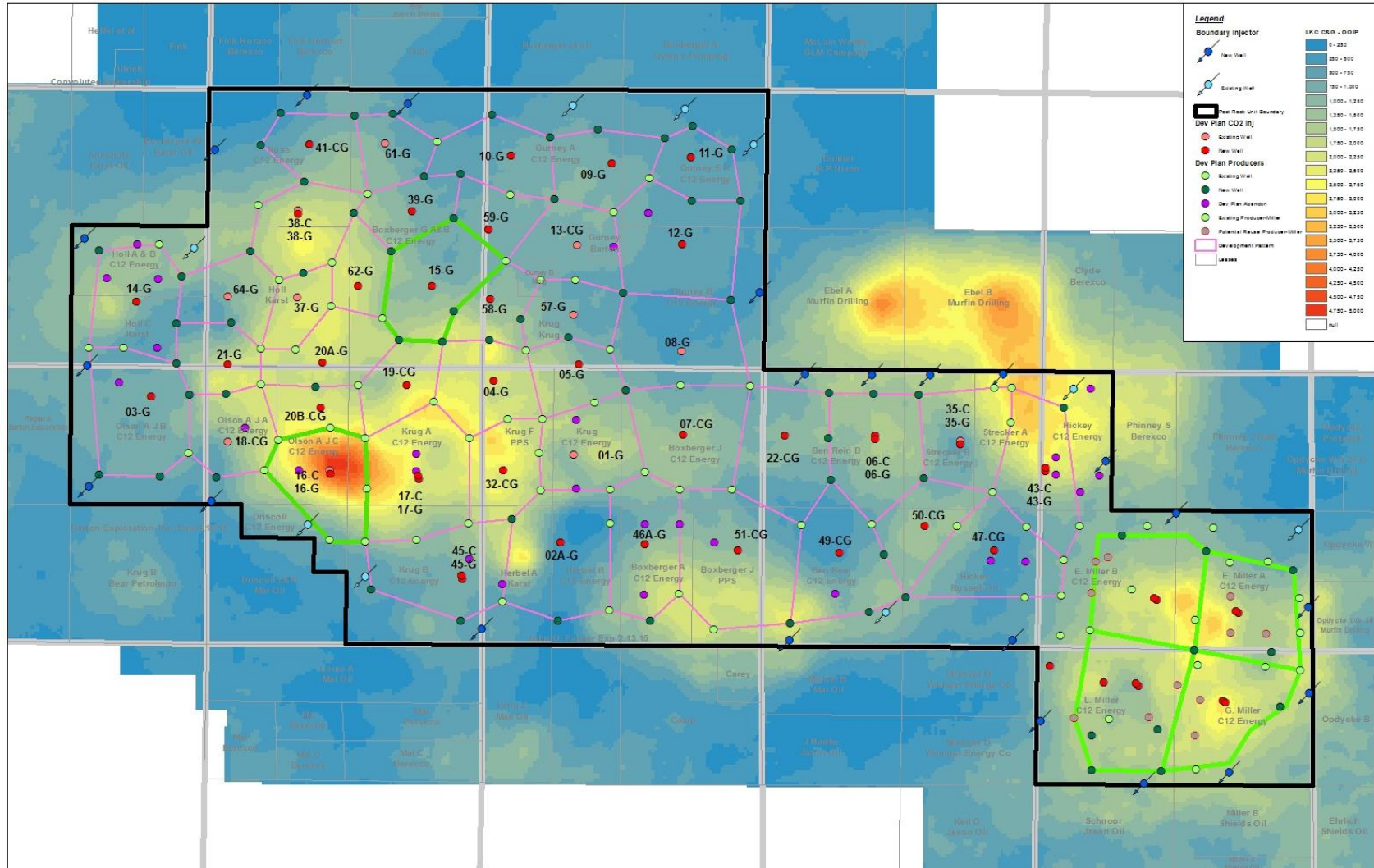
CO<sub>2</sub> Flood

11 million bbls





# Proposed C12 Kansas CO<sub>2</sub> Project – Hall Gurney Post Rock Unit







# C12 WI/NRI Summary

Working Interest							
Well Code	Well Name	C12: Kansas Oil, LLC	CAROLINA PROPERTIES, LLC	GCH OIL AND GAS LLC	GERALD RAUCH MARITAL TRUST	THREE M OIL COMPANY	Sum of WI
KS167L01	SHAFFER (LEASE LEVEL)	1.000000					1.000000
KS167L02	GLM BOXBERGER A (LEASE LEVEL)	1.000000					1.000000
KS167L03	GLM BOXBERGER J (LEASE LEVEL)	1.000000					1.000000
KS167L04	GLM NUSS (LEASE LEVEL)	1.000000					1.000000
KS167L05	GLM - G BOXBERG (LEASE LEVEL)	1.000000					1.000000
KS167L06	FINLEY OLSON A J A (LS LEVEL)	0.939957	0.021408	0.006290	0.006290	0.026055	1.000000
KS167L07	FINLEY OLSON A J C (LS LEVEL)	0.970828	0.010401	0.003056	0.003056	0.012659	1.000000
KS167L08	PROSP STRECKER A (LEASE LEVEL)	1.000000					1.000000
KS167L09	CARTER HERBEL B (LEASE LEVEL)	1.000000					1.000000
KS167L10	CROWN KRUG (LEASE LEVEL)	1.000000					1.000000
KS167L11	JHR BEN REIN (LEASE LEVEL)	1.000000					1.000000
KS167L12	GLM GURNEY A (LEASE LEVEL)	1.000000					1.000000
KS167L13	GLM GURNEY B (LEASE LEVEL)	1.000000					1.000000
KS167L14	GLM GURNEY EP (LEASE LEVEL)	1.000000					1.000000
KS167L15	E MILLER A (LEASE LEVEL)	1.000000					1.000000
KS167L16	E MILLER B (LEASE LEVEL)	1.000000					1.000000
KS167L17	L MILLER (LEASE LEVEL)	1.000000					1.000000
KS167L18	G MILLER (LEASE LEVEL)	1.000000					1.000000
KS167L19	HICKEY (LEASE LEVEL)	1.000000					1.000000
KS167L20	PROSP STRECKER B (LEASE LEVEL)	1.000000					1.000000
KS167L21	MID-CON HOLL A&B (LEASE LEVEL)	1.000000					1.000000
KS167L22	EMPIRE KRUG A (LEASE LEVEL)	1.000000					1.000000
KS167L23	EMPIRE KRUG B (LEASE LEVEL)	1.000000					1.000000
KS167L24	EMPIRE DRISCOLL (LEASE LEVEL)	1.000000					1.000000
KS167L25	EMPIRE OLSON A J B (LS LEVEL)	1.000000					1.000000
Net Revenue Interest							
Well Code	Well Name	C12 Kansas			Other		Sum of NRI
		Sum of Working Interest	Sum of Royalty Interest	Sum of Override Interest	Sum of Working Interest	Sum of Royalty Interest	
KS167L01	SHAFFER POW	0.820312400	0.000000000	0.000000000	0.000000000	0.179687600	1.000000000
KS167L02	GLM BOXBERGER A (LEASE LEVEL)	0.875000000	0.000195300	0.000000000	0.000000000	0.124804700	1.000000000
KS167L03	GLM BOXBERGER J (LEASE LEVEL)	0.875000000	0.000429600	0.000000000	0.000000000	0.124570400	1.000000000
KS167L04	GLM NUSS (LEASE LEVEL)	0.875000000	0.000000000	0.000000000	0.000000000	0.125000000	1.000000000
KS167L05	GLM - G BOXBERG (LEASE LEVEL)	0.675000000	0.000000000	0.000000000	0.000000000	0.325000000	1.000000000
KS167L06	FINLEY OLSON A J A (LS LEVEL)	0.771768200	0.000000000	0.000000000	0.049299360	0.178932440	1.000000000
KS167L07	FINLEY OLSON A J C (LS LEVEL)	0.705330017	0.000000000	0.000000000	0.021194163	0.273475820	1.000000000
KS167L08	PROSP STRECKER A (LEASE LEVEL)	0.775000000	0.005483750	0.000000000	0.000000000	0.219516250	1.000000000
KS167L09	CARTER HERBEL B (LEASE LEVEL)	0.875000200	0.000976500	0.000000000	0.000000000	0.124023300	1.000000000
KS167L10	CROWN KRUG (LEASE LEVEL)	0.816797000	0.000000000	0.000000000	0.000000000	0.183203000	1.000000000
KS167L11	JHR BEN REIN (LEASE LEVEL)	0.875000000	0.000000000	0.000000000	0.000000000	0.125000000	1.000000000
KS167L12	GLM GURNEY A (LEASE LEVEL)	0.875000000	0.000000000	0.000000000	0.000000000	0.125000000	1.000000000
KS167L13	GLM GURNEY B (LEASE LEVEL)	0.812500000	0.000000000	0.000000000	0.000000000	0.187500000	1.000000000
KS167L14	GLM GURNEY EP (LEASE LEVEL)	0.750000000	0.000000000	0.000000000	0.000000000	0.250000000	1.000000000
KS167L15	E MILLER A (LEASE LEVEL)	0.875000000	0.000000000	0.000000000	0.000000000	0.125000000	1.000000000
KS167L16	E MILLER B (LEASE LEVEL)	0.875000000	0.004154000	0.000000000	0.000000000	0.120846000	1.000000000
KS167L17	L MILLER (LEASE LEVEL)	0.875000000	0.000000000	0.000000000	0.000000000	0.125000000	1.000000000
KS167L18	G MILLER (LEASE LEVEL)	0.875000000	0.000000000	0.000000000	0.000000000	0.125000000	1.000000000
KS167L19	HICKEY (LEASE LEVEL)	0.875000000	0.000000000	0.000000000	0.000000000	0.125000000	1.000000000
KS167L21	MID-CON HOLL A&B (LEASE LEVEL)	0.875000000	0.000000000	0.000000000	0.000000000	0.125000000	1.000000000
KS167L22	EMPIRE KRUG A (LEASE LEVEL)	0.873200000	0.000000000	0.000000000	0.000000000	0.126800000	1.000000000
KS167L23	EMPIRE KRUG B (LEASE LEVEL)	0.873200000	0.000000000	0.000000000	0.000000000	0.126800000	1.000000000
KS167L24	EMPIRE DRISCOLL (LEASE LEVEL)	0.873200000	0.000000000	0.000000000	0.000000000	0.126800000	1.000000000
KS167L25	EMPIRE OLSON A J B (LS LEVEL)	0.734202500	0.000000000	0.000000000	0.000000000	0.265797500	1.000000000
Other Interests Owned in Kansas							
Royalty Interest	Boxberger J		0.000207500				
Overriding Interest	F Krug			0.020507800			